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PATENT  
Attorney Docket No. P04854US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Campbell, et al.  
SERIAL NO: 09/973,283  
FILED: October 9, 2001  
TITLE: METHODS AND COMPOSITIONS FOR MODULATING THE IMMUNE  
SYSTEM OF ANIMALS

Group Art Unit: 1619  
Examiner:  
Confirmation No: 5786

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**INFORMATION DISCLOSURE STATEMENT  
FILED WITHIN THREE MONTHS OF FILING OR  
BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. § 1.97(b))**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This information disclosure statement is being filed **within three** months of the filing date of the application or date of entry into the national stage of an **international** application or before the mailing date of a first Office Action on the merits, **whichever event** occurs last.

Attached are Forms PTO/SB/08A and 08B (formerly Form PTO-1449) listing the relevant art known to the applicant herein. Copies of the listed references are enclosed. The Examiner is requested to consider the references and make them of record.

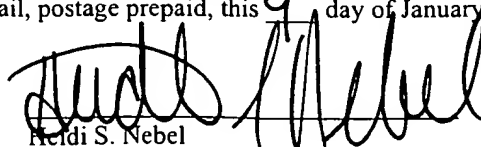
Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose. Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the

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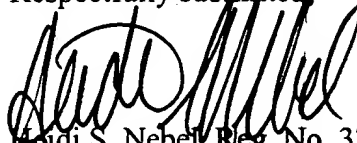
I hereby certify that the above correspondence was mailed to the Assistant Commissioner for Patents, Washington, D.C. 20231, as First Class mail, postage prepaid, this 9 day of January, 2002.

  
Heidi S. Nebel

information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Heidi S. Nebel', written over the typed name.

Heidi S. Nebel, Reg. No. 37,719

ZARLEY, McKEE, THOMTE, VOORHEES  
& SEASE

801 Grand Avenue, Suite 3200

Des Moines, Iowa 50309-2721

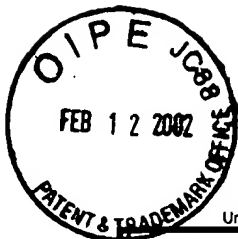
Phone No. (515) 288-3667

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Attorneys of Record



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Substitute for form 1449A/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/973,283		
		Filing Date	October 9, 2001		
		First Named Inventor	CAMPBELL, Joy M.		
		Art Unit	1619		
		Examiner Name			
Sheet	1	of	2	Attorney Docket Number	P04854US1

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 5,531,988	07/02/1996	Paul, Stephen M.	
		US- 5,585,098	12/17/1996	Coleman, Marilyn A.	
		US- 5,744,134	04/28/1998	Paul, Stephen M.	
		US- 5,762,934	06/09/1998	Williams, et al.	
		US- 5,771,999	06/30/1998	Greenblatt et al.	
		US- 5,817,312	10/06/1998	Gristina et al.	
		US- 5,980,953	11/09/1999	Beck et al.	
		US- 6,086,878	07/11/2000	Adalsteinsson et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> - Number <sup>3</sup> - Kind Code <sup>4</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T * <sup>5</sup>
		EP 1 044 690	10/18/2000	APC Europe S.A.		

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

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Substitute for form 1449B/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/973,283		
		Filing Date	October 9, 2001		
		First Named Inventor	CAMPBELL, Joy M.		
		Group Art Unit	1619		
		Examiner Name			
Sheet	2	of	2	Attorney Docket Number	P04854US1

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Arthington, et al., "The use of concentrated spray-dried plasma protein in the preweaned/neonatal pig", American Association of Swine Practitioners, pp. 123-124 (1997)	
		Buttgereit, et al., "Bioenergetics of immune functions: fundamental and therapeutic aspects", Immunology Today, 21(4):192-199 (2000)	
		Campbell, et al., "Use of plasma protein in swine feeds examined", Feedstuffs, the Weekly Newspaper for Agribusiness, 70(44) (October 26, 1998)	
		Dwyer, et al., "Manipulating the immune system with immune globulin", The New England Journal of Medicine, 326(2):107-116	
		Eibl M.D., et al., "Prevention of necrotizing enterocolitis in low-birth-weight infants", The New England Journal of Medicine, 319(1): 1-7 (1988)	
		Johnson, et al, "Inhibition of growth by pro-inflammatory cytokines: an integrated view", Laboratory of Integrative Biology, Department of Animal Sciences, University of Illinois, 75:1244-1255 (1997)	
		Korhonen, et al, "Bactericidal effect of bovine normal and immune serum, colostrum and milk against helicobacter pylori," Journal of Applied Bacteriology, 78: 655-662 (1995)	
		Spurlock, et al, "Regulation of metabolism and growth during immune challenge: an overview of cytokine function", Journal of Animal Science, 75: 1773-1783 (1997)	
		Touchette, et al, "Feeding spray-dried plasma decreases the activation of the hypothalamic-pituitary-adrenal axis", Journal of Animal Science, 78 and 83 #769 p. 181 (2000) Abstract	
		Touchette, et al, "Feeding spray-dried plasma (SDP) alters the immunological response of the weaned pig to a lipopolysaccharide (LPS) challenge", Journal of Animal Science, 77 #173 p. 43 (2000) Abstract	
		Touchette, et al, "Effect of spray -dried plasma and lipopolysaccharide (LPS) on intestinal morphology and the hypothalamic-pituitary-adrenal (HPA) axis of the weaned pig", Journal of Animal Science, 77 #130 p. 56 (2000) Abstract	
		Webel, et al, "Time course of increased plasma cytokines, cortisol, and urea nitrogen in pigs following intraperitoneal injection of lipopolysaccharide", Journal of Animal Science, 75: 1514-1520 (1997)	
		Wolf, et al, "The anti-inflammatory effect of an oral immunoglobulin (IgA-IgG) preparation and its possible relevance for the prevention of necrotizing enterocolitis", Acta Paediatr Suppl 396: 37-40 (1994)	
		Zannelli, et al, "A comparison of the immunological response to lipopolysaccharide (LPS) versus e.coli challenge in the weaned pig", Journal of Animal Science, 77 #229 p.57 (2000) Abstract	

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